

Enterprise Data Backup Standard

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PURPOSE

To establish a standard to ensure backup copies of electronic data are created so that data availability and retention objectives are satisfied.

INTRODUCTION

Iowa's citizens hold state government to the highest standard for the availability and retention of data. As stewards of citizen information, we are accountable for exercising effective data backup practices, which include frequent back up of state data, secure offsite storage, and reliable data retrieval. To ensure the viability of a data backup and retention program, it is important to systematically test backup and retrieval processes to ensure that these processes and associated technical infrastructure performs in a reliable and accurate manner.

While it is acknowledged that there may be additional costs associated with a backup and retention program to satisfy these expectations, there is also the justification for such activities to meet the accountability and assurance expectations of Iowa's citizens and state government's business programs. This is, in effect, a form of insurance to protect the data of state government, it's citizens, and its stakeholders.

This standard does not attempt to determine which specific data is addressed by the standard. Each agency or data custodian holds the responsibility for making those determinations. Each agency is the best source of knowledge for determining the data they require to accomplish their business objectives and their responsibilities to their stakeholders. It is also understood that determining the data to backup and the length of retention incorporates the application of risk management principles.

In summary, this standard addresses the backup and retrieval of data to ensure data is available in accordance with agency requirements.

STANDARD

This standard consists of 4 major components addressing a data backup and retrieval program:

1. Essential data will be backed up
2. Backup data will be stored at a location that is offsite from its original creation and usage
3. Testing of the backup process will be routinely performed to yield proven successful results
4. The proven ability to retrieve and restore backup data will yield successful results

Each agency or its designated data custodian will backup critical information daily. Daily backups are necessary to help an agency return to a point-in-time state prior to a data loss or a disaster or malfunction to an information system. Backup data is expected to be stored in a location that is offsite from its original operational location as soon as possible and no later than 8 hours of when the backup was taken.

Each agency or its designated data custodian will be able to retrieve the information from the backup media. Retrieval includes the ability to access, recover, and restore data. A backup is useless if an agency cannot take the information from the backup media and restore it back to production.

Each agency or its designated custodian will be able to demonstrate that their backup, offsite storage, and retrieval processes perform in a consistently reliable and successful manner. Each agency will test their backup and recovery procedures. The testing program will accomplish these objectives: 1) demonstrate whether the backup was successful and all intended data was backed up as intended; 2) demonstrate that an agency can indeed recover the data from their backup media in a timely manner and have the ability to utilize or process the data as may be

required; 3) demonstrate that the testing processes and procedures are functional and valid by testing them at least annually.

The subject data for this standard will be determined by each agency in accordance with agency requirements.